

AMENDMENTS TO THE CLAIMS

Please cancel claims 5 and 13 and amend claims 1 and 18 as follows:

1. (currently amended) A process for delivering nucleic acids to muscle cells in a mammalian heart, comprising: a) accessing an *in vivo* blood vessel; and, b) inserting an injector into the blood vessel near or in the heart, *in vivo*, and ~~;~~ c) injecting a solution containing nucleic acids into the blood vessel lumen and increasing hydrostatic pressure in the lumen; ~~and, d) thereby~~ delivering the nucleic acids to the heart muscle cells outside of the blood vessel via the pressure, wherein invasiveness is limited to accessing the blood vessel, inserting the injector into the blood vessel, and injecting the solution.
2. (original) The process of claim 1 wherein the nucleic acid is expressed.
3. (canceled)
4. (previously amended) The process of claim 2 wherein injecting the nucleic acid includes injecting the nucleic acid through a catheter.
5. (canceled)
6. (previously amended) The process of claim 5 wherein the nucleic acid is selected from the group consisting of DNA, RNA, plasmid DNA, oligonucleotides, and nucleic acid contained in viruses.
- 7-11. (canceled)
12. (previously amended) The process of claim 4 wherein injecting the nucleic acid includes injecting a predetermined volume of nucleic acid during a predetermined time.
13. (canceled)
14. (previously amended) The process of claim 13 wherein the nucleic acid is selected from the group consisting of DNA, RNA, plasmid DNA, and nucleic acid contained in viruses.
- 15-17. (canceled)
18. (currently amended) A process for gene expression in mammalian heart muscle cells, comprising: a) accessing an *in vivo* blood vessel; b) inserting an injector into the blood vessel near or in the heart, *in vivo*, and ~~;~~ c) injecting a solution containing nucleic acids encoding a protein into the blood vessel lumen and increasing hydrostatic pressure in the lumen thereby ~~;~~ d) delivering the nucleic acids to the heart muscle cells outside of the blood vessel via the pressure; and, e) expressing the nucleic acids to provide a therapeutic protein, wherein invasiveness is limited to accessing the blood vessel, inserting the injector into the blood vessel, and injecting the solution.
19. (canceled)
20. (previously amended) The process of claim 18 wherein injecting the nucleic acid includes injecting the nucleic acid through a catheter.
21. (original) The process of claim 1 wherein the nucleic acid consists of naked DNA.
22. (original) The process of claim 18 wherein the nucleic acid consists of naked DNA.

AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows:

On page 1, after -- filed on September 14, 1998 --

Please insert -- -- and is a continuation-in-part of application No. 09/391,260, filed on Sep. 7, 1999, which is a division of application No. 09/975,573, filed on Nov. 21, 1997; now Pat. No. 6,265,387, which is a continuation of application No. 08/571,536, filed on Dec. 13, 1995, now abandoned -- --

Applicants hereby submit a marked version of the Replacement Sheet to show the changes made. Please enter Replacement Sheet 1.